

Claim 38: The isolated nucleic acid molecule of claim 36, which encodes a protein having the amino acid sequence SEQ ID NO: 2.

Claim 39: The isolated nucleic acid molecule of claim 37, which encodes a protein having the amino acid sequence SEQ ID NO: 12.

Claim 40: Expression vector comprising the isolated nucleic acid molecule of claim 36, operably linked to a promoter.

Claim 41: Expression vector comprising the isolated nucleic acid molecule of claim 37, operably linked to a promoter.

Claim 42: Prokaryotic cell or eukaryotic cell, transformed or transfected with the isolated nucleic acid molecule of claim 36.

Claim 43: Prokaryotic cell or eukaryotic cell, transformed or transfected with the isolated nucleic acid molecule of claim 37.

Claim 44: Prokaryotic cell or eukaryotic cell, transformed or transfected with the expression vector of claim 40.

Claim 45: Prokaryotic cell or eukaryotic cell, transformed or transfected with the expression vector of claim 41.

Claim 46: The prokaryotic cell of claim 42, wherein said cell is E. coli.

Claim 47: The prokaryotic cell of claim 43, wherein said cell is E. coli.

Claim 48: The eukaryotic cell of claim 42, wherein said cell is S. cerevisiae, PAE, COS or CHO.

Sub D Claim 49: The eukaryotic cell of claim 43, wherein said cell is S. cervisiae, PAE, COS or CHO.

Claim 50: The prokaryotic cell of claim 44, wherein said cell is E. coli.

Claim 51: The prokaryotic cell of claim 45, wherein said cell is E. coli.

Claim 52: The eukaryotic cell of claim 44, wherein said cell is S. cervisiae, PAE, COS or CHO.

Claim 53: The eukaryotic cell of claim 45, wherein said cell is S. cervisiae, PAE, COS or CHO.

19
Claim 54: An isolated ALK-1 protein which is encoded by the isolated nucleic acid molecule of claim 36.

20
Claim 55: An isolated ALK-1 protein which is encoded by the isolated nucleic acid molecule of claim 37.

Claim 56: The isolated ALK-1 protein of claim 54, having the amino acid sequence set forth in SEQ ID NO: 2.

Claim 57: The isolated ALK-1 protein of claim 55, having the amino acid sequence set forth in SEQ ID NO: 12.

Sub D 2
Claim 58: A method for determining if a substance is a ligand encoded by a nucleic acid molecule which encodes an ALK-1 protein having the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 12, comprising contacting said substance to a cell which presents ALK-1 on its surface, and determining binding of said substance to an ALK-1 molecule on the surface of said cell as a determination that said substance is an ALK-1 ligand.